

REMARKS

Claims 1-78 were originally presented in the subject application. Claim 73 was amended in a response dated May 5, 2006. No claims have herein been amended, added or canceled. Claims 1-72, 74 and 75 have been withdrawn as directed to non-elected inventions. Therefore, claims 1-81 remain in this case, with only claims 73 and 76-81 being actively examined.

Applicant respectfully requests reconsideration and withdrawal of the various grounds of rejection.

Restriction Requirement

Though not actually mentioned, presumably the Office Action maintained the restriction requirement under 35 U.S.C. §121. The claims of the application were restricted to Group I (claims 1-53), Group II (claims 54-72), and Group III (claims 73-78). Further, the Group III claims were restricted to species A (claims 73, 74, 77 and 78), B (claims 73, 75, 77 and 78) and C (claims 73 and 76-78).

Applicant previously elected the claims of Group III, species C, i.e., claims 73 and 76-78. However, as noted in a prior Office Action, claim 73 is currently a generic claim. If allowed, Applicant will have the right to bring claims 74 and 75 (i.e., species A and B) back into active prosecution.

35 U.S.C. §102 Rejection

The Office Action rejected claims 73 and 77-81 under 35 U.S.C. §102(b), as allegedly anticipated by Araki et al. (U.S. Patent No. 3,702,054). Applicant respectfully, but most strenuously, traverses this rejection.

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In

this instance, Araki et al. fails to disclose at least one element of claim 73 and as a result does not anticipate, or even render obvious, Applicant's invention.

As an initial matter, Applicant points out that the claimed "n-point star" shape, wherein n is at least three, is expressly defined in the present application at numbered paragraph 0039, with examples in the following paragraphs. That definition is, therefore, part of the claim and must be considered. Numbered paragraph 0039 is reproduced below for convenience:

The efficiency of a turbine brush seal is affected by the cross-sectional shape of the individual filaments. While turbine brush seal filaments in the past have had a circular cross-sectional shape, the present invention utilizes an n-point star cross-sectional shape. As used herein, the term "n-point star" shape refers to a shape that has at least three arms (i.e.,  $n \geq 3$ ), the faces of each arm extending from the body of the star and meeting either actually or extendedly in a sharp point, and where an angle between the faces of adjacent arms (either the actual angle if the faces meet at a point, or angle between the extensions of the faces if they meet at a radiused area) is less than 180 degrees from the perspective of outside the filament looking into the filament, as illustrated in the following examples.

Applicant submits that Araki et al. does not meet the definition of "n-point star" given in the present application. Araki et al. is generally concerned with twisting carbon fibers into yarn or thread, and calls for fibers that are circular in cross-section prior to twisting. There are only two mentions in Araki et al. of a star-shaped carbon fiber cross-section. The first mention, at column 1, lines 45-46 simply discloses that common shapes for carbon fibers include star shapes. However, there are no details or drawings provided regarding what is meant by "star shape." The only other mention of a star shape in Araki et al. is at column 4, lines 29-38, in which it is mentioned that carbon fibers need to be circular for the invention, and that irregular cross-sectional shapes like stars do not increase in mechanical strength when twisted. Thus, Araki et al. actually teaches away from the use of a star-shaped cross-section. Moreover, the mere mention of a star shape with no details does not meet the definition of "n-point star" provided in the present application.

Therefore, Applicant submits that claim 73 cannot be anticipated by Araki et al.

35 U.S.C. §103 Rejection

The Office Action rejected claim 76 under 35 U.S.C. §103, as being obvious over Araki et al. in view of anyone of JP 2000045174 A, JP 352148219 A, and JP 60162868 A. Applicant respectfully, but most strenuously, traverses this rejection.

As noted above with respect to the anticipation rejection over Araki et al., Applicant submits that Araki et al. teaches away from the use of a star-shaped cross-section for a carbon fiber. Thus, Applicant submits that one skilled in the art would not combine Araki et al. with any of the three cited Japanese references. Therefore, Applicant submits the combination is improper and should be withdrawn.

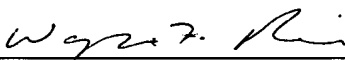
CONCLUSION

Applicant submits that the dependent claims not specifically addressed herein are allowable for the same reasons as the independent claim from which they directly or ultimately depend, as well as for their additional limitations.

For all the above reasons, Applicant maintains that the claims of the subject application define patentable subject matter and earnestly requests allowance of claims 73 and 76-81, as well as reinstatement of claims 74 and 75.

If a telephone conference would be of assistance in advancing prosecution of the subject application, Applicant's undersigned attorney invites the Examiner to telephone him at the number provided.

Respectfully submitted,

  
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